

REMARKS

I. Introduction

Claims 1 to 29 are currently pending in this application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

Applicants note with appreciation the acknowledgment of the claim for foreign priority and the indication that all of the certified copies of the priority documents have been received.

Applicants thank the Examiner for considering the previously filed Information Disclosure Statement, PTO-1449 paper and cited references.

II. Rejection of Claims 1, 2, 7 and 8 Under 35 U.S.C. § 102(b)

Claims 1, 2, 7 and 8 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,285,452 ("Reba et al."). Applicants respectfully submit that claims 1, 2, 7 and 8 are patentable over Reba et al. for at least the following reasons.

Claim 1 relates to a method for producing a spunbonded nonwoven fabric by extruding a linear sheet of filaments arranged side by side in parallel, in the form of a curtain from a plurality of spinning capillaries. Claim 1 recites aerodynamical pulling off and drawing of a filament sheet (8) which one of emerges from a drawing duct channel (12) and is pulled off a spool. Claim 1 has been amended to recite that the linear sheet of filaments is arranged laterally crosswise to a production direction. Claim 1 has further been amended to recite that the filament sheet is moved laterally crosswise to the production direction by an air flow having periodically changing directions, the air flow being oriented alternately at an angle toward the filament sheet (8) as viewed in the horizontal plane.

Reba et al. purportedly relate to a system and method for dispersing filaments. Filaments 5 are stated to be drawn through a high velocity jet system and exit the system through an opening in discharge means 2. See col. 3, lines 48 to 50. Discharge means 2 is stated to cause dispersion of filaments 5 in a plane parallel to opposed Coanda surfaces 3. See col. 3, lines 60 to 62. A Coanda effect is stated to be applied to the filaments 5 by using a pulsating fluid as the filaments 5 pass within

region 8 so as to effect filament oscillation in a perpendicular plane. See col. 4, lines 17 to 20.

Nowhere, however, do Reba et al. disclose, or even suggest, a filament sheet arranged laterally crosswise to a production direction and which is moved laterally crosswise to the production direction by an air flow having periodically changing directions, as recited in amended claim 1. As indicated above, a Coanda effect is stated to be applied to the filaments 5 by using a pulsating fluid as the filaments 5 pass within region 8 so as to effect filament oscillation in a perpendicular plane, i.e., in the production direction. See col. 4, lines 17 to 20. Therefore, the filament oscillation in Reba et al. is not laterally crosswise, as recited in claim 1. The Office Action admits that Reba et al. fail to disclose horizontal blowing of the air jets against the filaments in the feeding operation. See Office Action at p. 5.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). As more fully set forth above, it is respectfully submitted that Reba et al. does not disclose, or even suggest, a filament sheet arranged laterally crosswise to a production direction and which is moved laterally crosswise to the production direction by an air flow having periodically changing directions, as recited in amended claim 1.

Additionally, to reject a claim under 35 U.S.C. § 102, the Examiner must demonstrate that each and every claim limitation is contained in a single prior art reference. See, Scripps Clinic & Research Foundation v. Genentech, Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). Still further, not only must each of the claim limitations be identically disclosed, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the inventions of the rejected claims, as discussed above. See, Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986). In particular, it is respectfully submitted

that, at least for the reasons discussed above, the reference relied upon would not enable a person having ordinary skill in the art to practice the inventions of the rejected claims, as discussed above. Accordingly, the anticipation rejection as to the rejected claims must necessarily fail for the foregoing reasons.

Therefore, it is respectfully submitted that Reba et al. does not anticipate independent claim 1. Accordingly, withdrawal of the 35 U.S.C. §102(b) rejection and allowance of independent claim 1 is respectfully requested.

As for claims 2, 7 and 8 which depend from claim 1 and therefore include all of the limitations of claim 1, Applicants submit that these claims are patentable for at least the reasons provided above in support of the patentability of claim 1. Therefore, withdrawal of the 35 U.S.C. § 102(b) rejection and allowance of claims 2, 7 and 8 are respectfully requested.

In regard to claim 8 Applicants respectfully submit the following additional arguments in support of patentability. Nowhere do Reba et al. disclose, or even suggest, that subsequent to the air-flow movement, the filament sheet (8) is **additionally** deflected by periodically moving flow-guide surfaces, as recited in claim 8. The Coanda surfaces are used to deflect the filaments 5 in the production direction. Reba et al. do not disclose an **additional** device for deflecting the filaments 5. Therefore, withdrawal of the 35 U.S.C. §102(b) rejection and allowance of claim 8 are respectfully requested.

III. Rejection of Claims 1 to 3, 7 and 8 Under 35 U.S.C. § 103 (a)

Claims 1 to 3, 7 and 8 were rejected under 35 U.S.C. § 103 (a) as unpatentable over the "admitted prior art" in view of Reba et al. and DE 2114854 ("DE '854"). Applicants respectfully submit that the combination of the "admitted prior art," Reba et al. and DE '854 does not render unpatentable claims 1 to 3, 7 and 8 for the following reasons.

The Office Action admits that Reba et al. fail to disclose horizontal blowing of the air jets against the filaments in the feeding operation. See Office Action at p. 5. The Office Action alleges, however, that those skilled in the art at the time the invention was made would have known how to apply the air jets horizontally against the fibers as they were fed from the deliver device as evidenced by DE '854. See Office Action at p. 5. Respectfully, as can be seen in Figure 1, the sheet of

filaments in DE '854 is arranged in or in-line with the direction of production. Therefore, the combination of the "admitted prior art," Reba et al. and DE '854 does not disclose, or even suggest, the lateral crosswise movement of a filament sheet **arranged laterally crosswise to a production direction** caused by an air flow having periodically changing directions, as recited in amended claim 1. Therefore, Applicants respectfully submit that the combination of the "admitted prior art," Reba et al. and DE '854 does not disclose all of the limitations of claim 1.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). As stated above, the combination of the "admitted prior art," Reba et al. and DE '854 does not disclose, or even suggest, the lateral crosswise movement of a filament sheet **arranged laterally crosswise to a production direction** caused by an air flow having periodically changing directions, as recited in amended claim 1. It is therefore respectfully submitted that the combination of the "admitted prior art," Reba et al. and DE '854 does not render obvious claim 1. Respectfully, application of horizontal air jets against a filament sheet arranged in the production direction (so as to assure that each individual filament cover the full width of the conveyor, see the attached translation of DE '854 at p. 2, line 15 to 16, for example) in no way renders it obvious to arrange for lateral crosswise motion of a filament sheet already arranged and at least partially already spanning the lateral crosswise width of the conveyor. Therefore, withdrawal of the 35 U.S.C. §103 (a) rejection and allowance of claim 1 are respectfully requested.

As for claims 2, 3, 7 and 8, which depend from amended claim 1 and therefore include all of the limitations of amended claim 1, Applicants submit that these claims are patentable for at least the same reasons provided above in support of amended claim 1. *In re Fine, supra* (any dependent claim depending from a non-obvious independent claim is non-obvious). Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection and allowance of claims 2, 3, 7 and 8 is respectfully requested.

Applicants respectfully submit the following additional reasons in support of the patentability of claims 7 and 8. Nowhere does the combination of the "admitted prior art," Reba et al. and DE '854 disclose, or even suggest, that the air flow is directed toward the filament sheet (8) from at least one of the front and the rear thereof, as recited in claim 7. With the filament sheet laterally crosswise to a direction of production, use of air to move the filaments laterally crosswise to the direction of production requires that the air flow be directed in the plane of the filament sheet. Nowhere does the combination of the "admitted prior art," Reba et al. and DE '854 disclose, or even suggest, directing air flow in the plane of the filament sheet. Further, nowhere does the combination of the "admitted prior art," Reba et al. and DE '854 disclose, or even suggest, that subsequent to the air-flow movement, the filament sheet (8) is additionally deflected by periodically moving flow-guide surfaces, as recited in claim 8. Therefore, it is respectfully submitted that the combination of the "admitted prior art," Reba et al. and DE '854 does not render obvious claims 7 and 8.

IV. Allowable Subject Matter

Applicants note with appreciation the indication of allowable subject matter contained in claims 4 to 6. In this regard, the Examiner will note that each of claims 4 to 6 has been rewritten herein in independent form to include all of the limitations of its respective base claim and any intervening claims. It is therefore respectfully submitted that claims 4 to 6 are in condition for immediate allowance.

V. Conclusion

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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